

IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method of producing biogas by anaerobic digestion of organic matter,
~~characterised by~~
comprising:
grinding organic matter,
mixing the organic matter with a liquid to form a slurry with a dry solids content of 15-45% by weight TS,
feeding the slurry to a tank reactor ~~(2, 102, 202, 302)~~
and, in the tank reactor, contacting the slurry with biogas-producing bacteria for digestion under anaerobic conditions,
and
digesting the slurry in the tank reactor ~~(2, 102, 202,~~
~~302)~~ at a dry solids content of 5-10% by weight TS while producing biogas.

2. (Original) A method as claimed in claim 1, in which the ground organic matter is mixed with a liquid to form a slurry with a dry solids content of 20-40% by weight TS.

3. (Currently Amended) A method as claimed in claim 1-~~or 2~~, in which at least half of the total dry solids of the slurry

originates from grain and/or dried grain offal and/or mixtures thereof.

4. (Original) A method as claimed in claim 3, in which the grain is essentially present in the form of whole and screened grains.

5. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~claim 1, in which organic matter of a type other than the first-mentioned organic matter is also digested in the reactor ~~(202; 302)~~, at least 10% by weight of the total dry solids introduced into the reactor originating from grain and/or dried grain offal included in the first-mentioned organic matter.

6. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~claim 1, in which the liquid with which the organic matter is mixed is essentially pure water.

7. (Currently Amended) A method as claimed in claim 1~~any one of claims 1-5~~, in which the liquid with which the organic matter is mixed at least partly is digested sludge which is removed from the reactor ~~(2; 102; 202; 302)~~.

8. (Currently Amended) A method as claimed in claim 1~~any one of the preceding claims~~, in which the organic matter is dried to a dry solids content of at least 70% by weight TS before being ground.

9. (Currently Amended) A device for producing biogas by anaerobic digestion of organic matter,
~~characterised in that the device (1; 100; 200; 300)~~
~~comprises comprising:~~

-a premixing tank ~~(18; 118; 218; 318)~~ for mixing ground organic matter with a liquid to a slurry with a dry solids content of 15-45% by weight TS; and

a feed pipe ~~(26; 4; 126; 104; 204; 304)~~ for feeding the slurry to a sealable, essentially gas-tight tank reactor ~~(2; 102; 202; 302)~~ for digesting the slurry at a dry solids content in the tank reactor ~~(2; 102; 202; 302)~~ of 5-10% by weight TS, said tank reactor ~~(2; 102; 202; 302)~~ having an agitator ~~(10; 110)~~ for agitating the matter in the tank reactor ~~(2; 102; 202; 302)~~, an inlet ~~(4; 104; 204; 304)~~ for slurry from the premixing tank ~~(18; 118; 218; 318)~~ and outlets ~~(6; 8; 106; 108; 206; 208; 306; 308)~~ for produced biogas and formed digested sludge.

10. (Currently Amended) A device as claimed in claim 9, in which a mill ~~(14; 114; 214; 314)~~ is arranged for grinding the organic matter before being introduced into the premixing tank ~~(18; 118; 218; 318)~~.

11. (Currently Amended) A device as claimed in claim 9 or 10, in which a supply pipe ~~(122; 222)~~ is arranged for feeding digested sludge from the reactor ~~(102; 202)~~ to the premixing tank ~~(118; 218)~~.

12. (New) A method as claimed in claim 2, in which at least half of the total dry solids of the slurry originates from grain and/or dried grain offal and/or mixtures thereof.

13. (New) A device as claimed in claim 10, in which a supply pipe is arranged for feeding digested sludge from the reactor to the premixing tank.